



IFW

THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT TRANSMITTAL FORM

Applicant(s): Kiefer et al.  
Serial No.: 10/552,103  
Filed: Herewith  
For: MELTING AND REFINING IN TANKS WITH COOLED WALLS  
Art Unit: 3742  
Examiner: Not Yet Assigned  
Confirmation No.: 4119  
Customer No.: 27623 Attorney Docket No.: 2133.113USU

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

We are enclosing:

1. Request for Corrected Filing Receipt;
2. Transmittal letter in duplicate; and
3. Postcard.

Please charge any additional fees or credit any such fees, if necessary to Deposit Account No. 01-0467 in the name of Ohlandt, Greeley, Ruggiero & Perle. A duplicate copy of this sheet is attached.

Respectfully submitted,

Date: November 2, 2006

Charles N. J. Ruggiero  
Reg. No. 28,468  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
One Landmark Square, 10<sup>th</sup> Floor  
Stamford, Connecticut 06901-2682  
(203) 327-4500

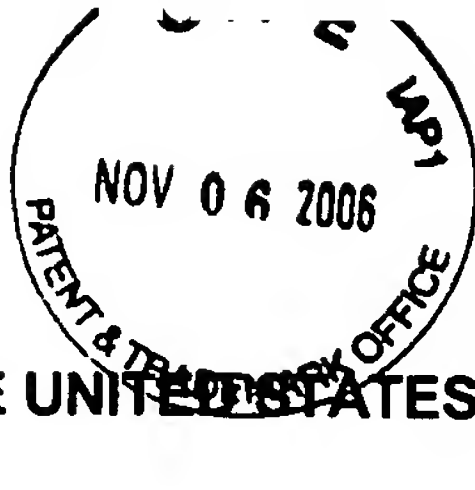
**CERTIFICATE OF MAILING**

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: MAIL STOP AMENDMENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450, ON November 2, 2006.

Ruth J. Olivo  
NAME

Ruth J. Olivo  
SIGNATURE

November 2, 2006  
DATE



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Kiefer et al.  
Serial No.: 10/552,103  
Filed: Herewith  
For: MELTING AND REFINING IN TANKS WITH COOLED WALLS  
Art Unit: 3742  
Examiner: Not Yet Assigned  
Confirmation No.: 4119  
Customer No.: 27623 Attorney Docket No.: 2133.113USU

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CORRECTED FILING RECEIPT**

Dear Sir:

The applicant is requesting that correction be made to the filing receipt. Please note that "Hildegard Romer" should read: **Hildegard Roemer**; "Guido Rake" should read: **Guido Raeke**.

Also, please note that the "Title" should read: **MELTING AND REFINING IN TANKS WITH COOLED WALLS** as stated on the first page of the specification filed on July 27, 2006. A copy of the original marked-up filing receipt and a copy of the first page of the specification are enclosed.

Please charge any additional fees or credit any such fees, if necessary to Deposit Account No. 01-0467 in the name of Ohlandt, Greeley, Ruggiero & Perle. A duplicate copy of this sheet is attached.

Respectfully submitted

Date: November 2, 2006

Charles N. J. Ruggiero  
Reg. No. 28,468  
Ohlandt, Greeley, Ruggiero & Perle, L.L.P.  
One Landmark Square, 10th Floor  
Stamford, Connecticut 06901-2682  
(203) 327-4500



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/552,103	07/27/2006	3742	2080	2133.113USU	8	41	3

CONFIRMATION NO. 4119

27623

OHLANDT, GREELEY, RUGGIERO & PERLE, LLP  
ONE LANDMARK SQUARE, 10TH FLOOR  
STAMFORD, CT 06901

## FILING RECEIPT



\*OC000000020120819\*

Date Mailed: 08/22/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Werner Kiefer, Mainz, GERMANY;  
~~Hildegard Roemer~~, Florsheim, GERMANY;  
Frank-Thomas Lentjes, Bingen, GERMANY;  
~~Guido Raake~~, Rummelsheim, GERMANY;  
Volker Ohmstede, Mainz, GERMANY;  
Karin Naumann, Ober-Olm, GERMANY;  
Michael Leister, Budenheim, GERMANY;  
Gerhard Nuessle, Jena, GERMANY;  
Rodek Erich, Mainz, GERMANY;  
Wolfgang Schmidbauer, Mainz, GERMANY;

Hildegard Roemer

Guido Raake

**Power of Attorney:** The patent practitioners associated with Customer Number 27623.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/EP04/03416 04/02/2003

## Foreign Applications

GERMANY 103 14 955.4 04/02/2003

If Required, Foreign Filing License Granted: 08/21/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/552,103**

Projected Publication Date: 11/30/2006

**RECEIVED**  
AUG 27 2006  
OHLANDT, GREELEY,  
RUGGIERO & PERLE, LLP

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

Melting and refining in ~~baths~~<sup>tanks</sup> with cooled walls

**Preliminary Class**

373

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

---

### LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

#### GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

#### **NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

Schott AG

**Melting and refining in tanks with cooled walls**5    Description:

The invention relates to a method and an apparatus for melting and/or refining, in particular in melting or refining units with cooled walls.

10

It is an object of the invention to provide a method and an apparatus with reduced energy consumption when melting and/or refining inorganic substances, preferably glasses, glass-ceramics and crystals. The invention is preferably to be used in a melting or refining unit with cooled walls, for example in a skull crucible or a conductively heated tank.

15

The prior art has described a range of melting units with cooled walls, in particular skull crucibles, which are used to melt glasses using radiofrequency.

20

In the present context, a radiofrequency-heated skull crucible is to be understood as meaning a crucible which is formed from cooled metal tubes and is surrounded by a radiofrequency coil. There are gaps between the metal tubes, allowing the radiofrequency energy to be introduced directly into the glass melt.

25

In the present context, a conductively heated tank or a conductively heated crucible is to be understood as meaning a tank or crucible in which heat is supplied at least in part

30